

**Traveler Title:**

Booster Multipole Corrector Magnet Measurements at MTF

**Specification No:**

5520-TR-333854

**Revision:**

NONE

**DR No:**

4530

**Step No:**

1.1

**Drawing No:**

5520-ME-445004

**Routing Form No:****Serial No:**

BMA054

**Rework ID:**

0

**Discrepancy Description:**

Traveler instructs to, The previous traveler has been reviewed, all Discrepancy Reports have been appropriately addressed, and the magnet is ready for measurement.

Actual attempt to perform a hipot to the cooling tubes discovered that the Normal Quad and the Normal Sextupole circuits are shorted to the upper cooling tube circuit.

1.) Actual attempt to perform a hipot to the cooling tubes discovered that the Normal Quad and the Normal Sextupole circuits are shorted to the upper cooling tube circuit.

2.) The repair has been made to the NQ, NS to upper cooling tube soft shorts.

3.) More hipot testing now indicates that the NQ has a soft short (44uA) to the lower cooling tube circuit, this appears to be at the C3 coil at the three O clock position.

**Originator:**

Dennis Gaw

**Date:**

6/17/2008 11:02:36 AM

**Cause of Nonconformance:**

NQ coil at the 12 "O" Clock position and the NS coil at the 3 "O" Clock position are shorted to the upper cooling tube circuit.

**Responsible Authority:**

Dennis Gaw

**Date:**

6/17/2008 11:02:36 AM

**Disposition:**

1. Put the magnet in vacuum oven and pump down to 40 um for 3 days. Re-test the magnet.
2. If the magnet still fails the electrical test, turn it up side down for the closer inspection around the 3 "O" Clock position.
3. If the electrical shorts are repaired then, perform a flow and hydro of the upper and lower water circuits and retest the coils electrical properties.

Disposition verify notes: The magnet was inserted into the vacuum tank for impregnation, while it was in the tank and before it was impregnated with epoxy a hipot test was performed, the data sheet indicates that the hipot current leakage is acceptable and the data sheet was inserted into the traveler.

**Responsible Authority:**

Sasha Makarov

**Date:**

6/25/2008 2:23:58 PM

**Corrective Action to Prevent Recurrence:**

Not clear yet

Disposition verify notes: None.

**Responsible Authority:**

Sasha Makarov

**Date:**

6/25/2008 2:23:58 PM

**Corrective Action/Disposition Verified By:**

Dennis Gaw

**Date:**

12:00:00 AM

Will Configuration be affected?:

☐ YES☒ NO**Identified problem area:**☐ Material☐ Manpower☒ Method☐ Machine☐ Measurement**Reviewed By:**

Bob Jensen

**Date:**

9/4/2008 3:33:11 PM